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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,073	03/16/2001	Lee CodeI Lawson Tarbotton	00.164.01	5551

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EXAMINER

SIMITOSKI, MICHAEL J

ART UNIT PAPER NUMBER

2134

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/809,073

Applicant(s)

TARBOTTON ET AL.

Examiner

Michael J. Simitoski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8,10-16,18-22,24-30,32-36 and 38-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,10-16,18-22,24-30,32-36 and 38-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The response of 12/12/2005 was received and considered.
2. Claims 1-2, 4-8, 10-16, 18-22, 24-30, 32-36 & 38-42 are pending.

Response to Arguments

3. In view of the appeal brief filed on 12/12/2005, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Regarding issue 1, appellant argues that the specification describes banning undesired, non-virus computer programs. However, the specification discloses banning programs and gives no bounds to the words “undesired” and “non-virus”. Therefore, the specification does not

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describe to one of ordinary skill in the art how to interpret these terms in the claims. The examples noted on p. 1, lines 14-15, while being examples, do not provide one of ordinary skill in the art the necessary definitions of the words “undesired” and “non-virus”.

Regarding issue 2, this rejection is withdrawn.

Regarding issue 2, appellant argues that “a computer program operable to control a computer ...” provides support for “computer controlling program”. However, it is unclear if the programs are the same. This issue could be resolved by replacing “computer controlling program comprising ...” with “said computer program operable to control the computer comprising ...”.

Appellant further argues that “undesired” can be any program and asserts that “including a limitation as to the type of undesired program would unduly limit such claim”. However, the Examiner maintains that when determining the scope of the claim to include an “undesirable” program, one must know the metes and bounds of what makes a program “undesirable” and therefore the claim(s) is/are indefinite. For the purposes of this Office Action as suggested by applicant, the Examiner is giving no patentable weight to “undesirable”.

Appellant further argues that the limitation “non-virus” program is definite because “there is a difference between a virus program and a non-virus program, since, for example, a virus program may cause damage by way of the virus whereas a non-virus program may simply be unwanted. However, the Examiner maintains that a concrete definition is not provided which clearly sets for the metes and bounds of the term “non-virus” and therefore the claim(s) is/are indefinite. This is because, as is well-known in the art, not all “viruses” are damaging and may just be unwanted. Further, what is considered a “virus” is, at least in part, opinion and open to

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interpretation. For instance, program code considered to be a virus on one system because it performs unwanted actions may not perform the same actions on another system, and therefore would not be considered a virus.

Regarding issue 4, the previous rejections are withdrawn.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-2, 4-8, 10-16, 18-22, 24-30, 32-36 & 38-42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The banning of an “undesired, non-virus computer program” is not described in the specification.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-2, 4-8, 10-16, 18-22, 24-30, 32-36 & 38-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 7, 15, 21, 29 & 35, the limitation “undesired” is indefinite because what is undesired to one person is not necessarily undesired to another.

Regarding claims 1, 7, 15, 21, 29 & 35, the limitation “non-virus” program is indefinite because there is no concrete difference between a virus program and a non-virus program. Many non-virus programs perform unwanted actions on a computer.

Regarding claim 21, it is unclear if the “user generated program identifying data” is a method step.

Regarding claim 22, the step of “operating ... to identify” has no tangible output.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 4, 7, 13, 15, 18, 21, 27, 29, 32, 35 & 41 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,452,442 to **Kephart**. Kephart discloses a user controlled program specifying logic (col. 5, lines 57-61) to specify said at least one computer program to be banned from use (col. 1, lines 35-49 & col. 5, lines 57-61), said at least one computer program comprising an undesired, non-virus computer program (col. 1, lines 15-34), and banned program identifying data generating logic responsive to said user controlled program specifying logic to generate banned program identifying data/signature (col. 5, lines 57-61) for at least one computer program to be banned from use, said banned program identifying data being operable to control

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anti computer virus logic/scanner (col. 1, lines 35-49) to identify computer programs banned from use (col. 1, lines 35-49 & col. 2, lines 5-12).

10. Claims 2, 8, 16, 22, 30 & 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kephart**, as applied to claims 1, 7, 15, 21, 29 & 35 above, in further view of “Bad IDEA” by Peter Szor (**Szor**), in further view of “Cryptography in Everyday Life” by Sarah Simpson (**Simpson**). Kephart lacks encrypting the banned program identifying data/signatures with a private key. However, Szor teaches that to prevent modification of antivirus signature files, the files should be encrypted (p. 19, col. 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kephart to encrypt the banned program identifying data/signatures. One of ordinary skill in the art would have been motivated to perform such a modification to prevent modification of antivirus signature files, as taught by Szor (p. 19, col. 2). As modified, Symantec lacks using a private key. However, Simpson teaches that by encrypting a file with a private key, the sender of the encrypted file can be verified by decrypting it with the corresponding public key (p. 1, ¶1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a private key. One of ordinary skill in the art would have been motivated to perform such a modification to verify the creator of the signature files, as taught by Simpson (p. 1).

11. Claims 5, 19 & 33, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kephart**, as applied to claims 4, 18 & 32 above, in further view of “Heuristic Anti-Virus Technology” by **Veldman**. Kephart discloses detecting known viruses, but lacks the banned

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program identifying data including heuristic data identifying one or more behavioral characteristics. However, Veldman teaches that using heuristics and examining behaviors of a program allows detection of unknown viruses (§1 & §2.1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to including in the identifying data, heuristic data identifying one or more behavioral characteristics. One of ordinary skill in the art would have been motivated to perform such a modification to detect unknown computer viruses, as taught by Veldman (§1, ¶1 & §2.1).

12. Claims 10, 24 & 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kephart, Szor and Simpson**, as applied claims 8, 22 & 36 above, in further view of U.S. Patent 5,844,986 to **Davis**. Kephart, as modified above, lacks storing the identifying data in a secure memory region. However, Davis teaches that to prevent a virus from corrupting a BIOS (secure flash memory), an authentication and validation procedure is required before the contents of the BIOS memory can be modified (col. 1, lines 32-45, lines 63-67 & col. 2, lines 1-7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to store the identifying data in a secure memory region (memory requiring authentication). One of ordinary skill in the art would have been motivated to perform such a modification to prevent a virus from corrupting the identifying data, as taught by Davis (col. 1, lines 32-45 & 63-67).

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13. Claims 11-12, 25-26 & 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kephart**, as applied to claims 7, 21 & 35 above, in view of "Norton AntiVirus User's Guide", by Symantec Corporation (**Symantec**).

Regarding claims 11, 25 & 39, Kephart, as modified above, lacks explicitly triggering a banned program action. However, Symantec teaches that it is known to alert a user for a response (pp. 39-40). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kephart's scanner to trigger a banned program action such as deleting the banned computer program (p. 40). One of ordinary skill in the art would have been motivated to perform such a modification to allow the user to rid the computer of the virus if the repair is not successful, as taught by Symantec (pp. 39-40).

Regarding claim 12, 26 & 40, Kephart, as modified above, lacks responding to an absence of said user generated banned program identifying data. However, Symantec teaches that it is important to have the most up-to-date virus signatures/banned program identifying data (p. 11) and that the signatures can be updated by restoring them from a remote source (p. 18). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kephart, as modified above, to respond to an absence of banned program identifying data by restoring the data from a remote source. One of ordinary skill in the art would have been motivated to perform such a modification to keep the system up-to-date, as taught by Symantec (pp. 11 & 18).

14. Claims 6, 14, 20, 28, 34 & 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kephart**, as applied to claims 1, 7, 15, 21, 29 & 35 above, in view of U.S. Patent 6,694,434

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to McGee et al. (**McGee**). Kephart lacks the banned program identifying data comprising data identifying permitted compute programs with all computer programs not matching a permitted computer program being identified as a computer program banned from use. However, McGee teaches that it would be desirable to control whether a calling application can execute on a processor, since unauthorized applications can be inadvertently downloaded onto a system (col. 2, lines 35-41). McGee further discloses that each calling application's unique application verification data is generated upon it's calling and compared to a list of authorized programs (col. 3, line 64 – col. 4, line 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kephart so that the banned program identifying data comprising data identifying permitted compute programs with all computer programs not matching a permitted computer program being identified as a computer program banned from use. One of ordinary skill in the art would have been motivated to perform such a modification to protect a computer against inadvertently downloaded unauthorized programs, as taught by McGee (col. 2, lines 35-41 & col. 3, line 64 – col. 4, line 4).

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Simitoski whose telephone number is (571) 272-3841. The examiner can normally be reached on Monday - Thursday, 6:45 a.m. - 4:15 p.m.. The examiner can also be reached on alternate Fridays from 6:45 a.m. – 3:15 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached at (571) 272-3838.

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Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-8300
(for formal communications intended for entry)

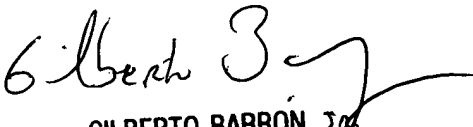
Or:

(571) 273-3841 (Examiner's fax, for informal or draft communications, please label "PROPOSED" or "DRAFT")

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJS
January 17, 2006


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